CLAIMS

What is claimed is:

1. A client system, comprising:

a file partitioner that divides a file into a plurality of blocks; and

a client control application operative to initiate a plurality of Transmission Control Protocol (TCP) connections and to assign each of the plurality of blocks to one of the TCP connection of the plurality of TCP connections, such that each block is transmitted via its assigned connection.

2. The system of claim 1, the plurality of blocks being transmitted to a server system, the server system comprising:

a server control application operative to monitor the plurality of TCP connections and to receive the plurality of blocks via the plurality of TCP connections, each block having an associated ordinal identifier;

a buffer that stores the received blocks; and

a concatenation control that retrieves a received block from the buffer and concatenates the received block into a file once blocks having an ordinal identifier prior to the received block have been received.

3. The system of claim 1, further comprising a buffer that stores the plurality of blocks for subsequent transmission.

4. The system of claim 1, the plurality of blocks being assigned to the plurality of TCP connections in a predetermined order.

5. The system of claim 1, the client control application providing e-mail notification of the status of transmission of the blocks over the plurality of TCP connections to at least one remote location.

6. The system of claim 1, the client control application operative to automatically reinitiate a TCP connection if a TCP connection is prematurely terminated.

7. The system of claim 1, the client control application operative to pause at least one of the plurality of TCP connections to allow a lagging connection access to the available bandwidth.

8. The system of claim 1, the client system further comprising a graphical user interface that provides status information to a user.

9. The system of claim 8, the graphical user interface comprising an abort key that ends the transmission of the plurality of blocks.

10. The system of claim 8, the graphical user interface further comprising a configuration routine that allows a user to specify a bandwidth to be used in the connection.

11. The system of claim 8, the status information comprising at least one of the size of the file, a duration associated with the transmission of the plurality of blocks, a bandwidth value associated with the transmission, and an estimated duration for the transmission to be completed.

12. The system of claim 10, the graphical user interface further comprising a configuration routine that allows a user to specify at least one of , an averaging period used for deriving the estimated duration for the transmission and a number of TCP connections utilized in the transfer.

13. A computer readable medium comprising the system of claim 1.

14. A server system, comprising:

a server control application operative to monitor a plurality of Transmission Control Protocol (TCP) connections and to receive a plurality of blocks via the plurality of TCP connections, each block having an associated ordinal identifier;

a buffer that stores the received blocks; and

a concatenation control that writes received blocks to a destination file once all blocks having an ordinal identifier, prior to the received block, have been written to the file.

15. The system of claim 14, the plurality of blocks being received from a client system, the client system comprising

a file partitioner that divides a source file to create the plurality of blocks; and

a client control application operative to initiate the plurality of TCP connections and to assign each of the plurality of blocks to one of the plurality of TCP connections, such that each block is transmitted via its assigned connection.

16. The system of claim 14, the server control application being operative to extract control data from at least one of the received blocks.

17. The system of claim 14, the concatenation control operative to monitor the buffer for blocks consecutive and subsequent to a received block.

18. The system of claim 14, the server system comprising a graphical user interface that provides status information to a user relating to transmission of the plurality of blocks and/or the concatenation of the received blocks.

19. The system of claim 18, the status information including at least one of the size of the file, an identification associated with a client system transmitting the file, a duration associated with the transmission of the plurality of

blocks, a bandwidth value associated with the transmission, and an estimated duration for the transmission to be completed.

20. The system of claim 18, the graphical user interface further comprising a manipulatable display such that a user can organize the status information in a desired manner.

21. A computer readable medium comprising the system of claim 14.

22. A method of transferring a file over a network comprising:

dividing a source file into a plurality of blocks at a first entity;

establishing a plurality of data connections between the first entity and a second entity;

assigning a block from the plurality of blocks to a respective data connection of the plurality of data connections; and

transmitting the plurality of blocks from the first entity to the second entity, each block being transmitted over its assigned data connection.

23. The method of claim 22, the method further comprising:

concatenating the plurality of blocks, including a first block, into a destination file during the transmission of at least one other block;

concatenating a block received at the second entity when all blocks having an ordinal identifier prior to the received block have been concatenated into the file; and

buffering a block received at the second entity when at least one block having an ordinal identifier prior to the received block has not been concatenated into the file.

24. The method of claim 22, the plurality of data connections utilizing Transmission Control Protocol (TCP) to transmit the assigned blocks.

25. A method of transferring a file from a first entity to a second entity over a network, said method comprising:

transmitting a plurality of blocks from the first entity to the second entity via a plurality of data connections;

concatenating a sequence of blocks, including a first block, into a file during the transmission of at least one other block within the sequence;

concatenating a block received at the second entity when all blocks having an ordinal identifier prior to the received block have been concatenated into the file; and

buffering a block received at the second entity when at least one block having an ordinal identifier prior to the received block has not been concatenated into the file.

26. The method of claim 25, further comprising:

dividing a source file to generate the plurality of blocks at the first entity; and

assigning at least two of the plurality of blocks to each of the plurality of data connections.

27. The method of claim 25, the plurality of data connections utilizing Transmission Control Protocol (TCP) to transmit the assigned blocks.